

## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

### Listing of Claims

1. (Currently amended) ~~The present invention relates to a~~ A process for isolating imperatorin, ~~an anti-first-pass effective low molecular weight linear furanocoumarin from~~ fruits of *Aegle marmelos* Correa fruits said process comprising the steps of:

- a) ~~extracting fresh/dried powdered material of~~  
~~mature/immature pulp of~~ fruits of *Aegle marmelos*  
~~Correa fruits directly with halogenated solvent~~ directly  
or with monohydric alcohol to obtain a miscella or an  
alcoholic extract respectively at ambient temperature  
~~for 24 to 48 hrs. or with halogenated solvent or~~  
~~monohydric, alcohol in a Soxhlett apparatus for 6 to 12~~  
~~hrs, wherein a ratio of the pulp to the solvent is 1:6;~~
- b) in the case where extraction has been with an alcohol  
concentrating the ~~extracted~~ alcoholic extract ~~solvent~~ up  
to 10-30% ~~by volume~~ of its original ~~extract~~ volume  
under vacuum;
- c) in the case where step (b) has been carried out,  
partitioning the concentrated alcoholic extract obtained  
in step (b) with a halogenated solvent to transfer

- imperatorin in ~~the non-polar~~ halogenated solvent and obtain a miscella;
- d) drying the ~~the~~ extracted ~~portion~~ miscella obtained directly in step (a) or by partition in step (c) over anhydrous sodium sulphate and evaporating the solvent to obtain a concentrate;
  - e) crystallizing the concentrate[s] obtained from step (d) ~~with~~ in a solvent and filtering the crystals so formed ~~to obtain a filtrate~~;
  - f) concentrating the filtrate obtained in step (e) and [~~;~~ (g)]subjecting the concentrated filtrate ~~of step (f)~~ to ~~silica gel~~ vacuum liquid chromatography on silica gel;
  - h)g) eluting imperatorin ~~from the concentrated filtrate of step (g) in a pet-ether-ethyl acetate mixture~~; in a solvent to afford a phytosteroids enriched fraction and pure imperatorin
  - i) ~~identifying the eluted fractions enriched with phytosterols mixture~~;
  - j) ~~identifying the fraction containing the eluted imperatorin~~;
  - k)h) crystallizing the fractions containing pure imperatorin ~~to obtain pure imperatorin~~

2. (Currently amended) A process as claimed in claim 1, wherein ~~the plant parts~~ said fruit of Aegle marmelos used for the extraction of imperatorin ~~are~~ is selected from the group

consisting of mature fruit and [/] immature/ripe fruit pulp and mixtures thereof.

3. (Currently amended) A process as claimed in claim 1, wherein the halogenated solvent used for direct extraction or partition is selected from the group consisting of dichlorormethane, chloroform, carbon tetrachloride and ethylene dichloride[;].

(Currently amended) A process as claimed in claim 1, wherein the monohydric alcohol solvent used for extraction is ~~selected preferably~~ either methanol or ethanol;

(Currently amended) A process as claimed in claim 1, wherein the imperatorin is crystallized from ~~the a~~ solvent, ~~wherein the solvent~~ is selected from the group consisting of pet-ether, dichloromethane, acetone and ~~methanol~~ mixtures thereof;

6. (Canceled)

7. (Currently amended) A process as claimed in claim 1, wherein the imperatorin remaining in mother liquor after crystallization is subjected to vacuum liquid chromatography over a ratio of the concentrated extract of step (g) to silica gel (230-400 mesh) is in the range ratio of 1:4 to 1:6[;].

8. (Canceled)

9. (New) A process as claimed in claim 1, wherein the pulp is fresh pulp or dried powdered pulp.

10. (New) A process as claimed in claim 1, wherein the pulp is extracted directly with a halogenated solvent or with monohydric alcohol at ambient temperature for 24 to 48 hrs with a pulp: solvent ratio of 1.3 to 1.6.

11. (New) A process as claimed in claim 1, wherein the pulp is extracted directly with a halogenated solvent or with monohydric alcohol in a Soxhlet apparatus for 6 to 12 hrs with a pulp: solvent ratio of 1.4 .

12. (New) A process as claimed in claim1, wherein the mature and immature fruits of *Aegle marmelos* Correa are screened by RP-HPLC in fresh and dry processes using different solvents.

13. (New) A process as claimed in claim 1, wherein furanocoumarins are selectively extracted with chlorinated solvent directly for transfer of furanocoumarins from the alcoholic phase with a chlorinated solvent selected from the group consisting of carbon tetrachloride, methylene dichloride and ethylene dichloride.

14. (New) A process as claimed in claim 1, wherein the partition of imperatorin from alcoholic to halogenated solvent reduces the bulkiness of the crude extract by 65 - 75%.

15. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from fresh mature fruits is in the range of 0.74 to 1.43% (dry weight basis) by direct process of two days cold percolation with EDC/DCM (pulp: solvent: 1:3).

16. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated

from dry mature fruits is in the range of 1.24 to 1.66% (dry weight basis) by direct process of two days cold percolation with EDC/DCM (pulp: solvent: 1:3).

17. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from fresh mature fruits is in the range of 2.19 to 2.15% (dry weight basis) by direct process of two days cold percolation with EDC/DCM (pulp: solvent: 1:6).

18. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from fresh mature fruits is 1.92/2.29% (dry weight basis) by process of EDC/DCM partition of methanolic extract.

19. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from immature fruits is in the range of 0.52% by dry process of DCM partition of methanolic extract.

20. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from mature fruits (3.12%), immature fruits (.89%) and ripe fruits (1.71%) by extraction in a Soxhlet apparatus for 6 - 12 hours with ethylenedichloride.